

Work Order ID 150705

Monday, August 29, 2016 3:04:10 PM

150705

Page 1

Item ID: D2741-NP Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Blade (No paint)
Start Date: 8/3/2016 Start Qty: 5.00 ***5*** Cust Item ID:
Required Date: 8/29/2016 Req'd Qty: 5.00 ***5*** Customer:
Reference:

Approvals: Process Plan: W Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2741	E								
100	BAND SAW	0.00							
100									
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	Cut blanks 13.850" long +0.063" -0.000"								
110	HAAS CNC VERTICAL MACHINING #1	0.00							
110									
HAAS 1	Memo	0.30							
HAAS CNC vertical machine #1	1-Machine per folio FA108								
	NO HOLES AS PER DWG NOTE 9								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.01							
Quality Control									

Cancel
w/o 153821
@ QTY 12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			

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N900040100

Setup Start *NS1*

Stop ***NS2***

5

Cust Item ID:

5

Customer:

Run Start *NR1*

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

130 QC8- Inspect parts - second check

130

Memo

Quality Control

0.03

140

Small Fab

Small Fab

Memo

0.02

Small Fab

1-Deburr

2-Bend per Dwg D2741

QC5- Inspect part completeness to step on W/O

0.00

150

QC

Memo

0.02

Quality Control

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Cust Item ID:

Start Date: 8/3/2016 **Start Qty:** 5.00 ***5***

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Customer:

Run Start *NR1*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

160

Outsource process - Heat Treat

0.00

160

149.99

Outsource1

Outsource process - Heat Treat

Memo

Issue P/O: _____

Harden material as per Dwg D2741

Min. Ultimate Tensile Strength = 152 ksi (34-40 HRC)

Min. Yield Tensile Strength = 141 ksi

Test report or Certification required

****Sand blast parts****

170

Receive & Inspect for Damage & Mat'l Certs

0.00

170

Packaging

Packaging

Memo

0.02

Ensure Test report or Certification attached

DQA: _____ Date: _____



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Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC5- Inspect part completeness to step on W/O	0.00							
180									
QC	Memo	0.02							
Quality Control									
220	Identify as per dwg & Stock Location: _____	0.00							
220									
Packaging	Memo	0.01							
Packaging	LOCATION WA002								
230	QC21- Final Inspection - Work Order Release	0.00							
230									
QC	Memo	0.08							
Quality Control									



DQA: _____ Date: _____



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OTHER : ☐																									

Picklist Print

Page 1

Monday, August 29, 2016 3:04:09 PM

Work Order ID: 150705

150705

Parent Item: D2741-NP

D2741-NP

Parent Item Name: Blade (No paint)

Start Date: 8/3/2016

Required Date: 8/29/2016

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A 14.04.08 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M4130NB0.500X03.00 0		Purchased	No				f	46.0000		6.073684			

M4130NB0 500X03 000

4130 Bar 0.500 x 3.00

Location

Loc Qty

Loc Code

MAT

46

m135027

46

DQA: _____ Date: _____



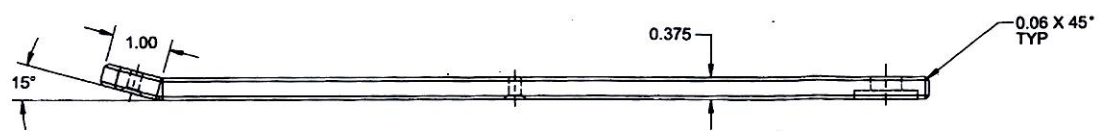
WORK ORDER NON-CONFORMANCE / UPDATE

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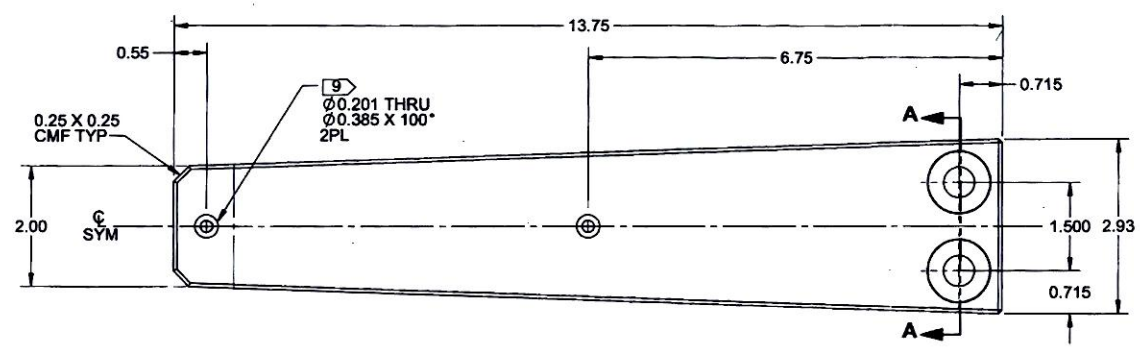
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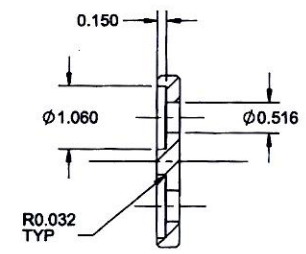
10,50705



D2741 BLADE
(MAKE FROM D2741F)



D2741F FLAT PATTERN



SECTION A-A

RELEASED
2014-04-04

NOTES:

- 1) MATERIAL: AISI 4130N STEEL BAR PER MIL-S-6758 OR AMS 6345/6348/6370/6528
REF DART SPEC. M4130N-B0.500X3.000
- 2) FINISH: D2741: POWDER COAT "WHITE" (4.3.5.2) PER DART QSI 005 4.3
D2741-NP: NO PAINT
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.030 TO 0.060 MAX
- 6) IDENTIFICATION: WITH DART P/N "D2741" OR D2741-NP, AND B/N "BXXXXX", PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: 3.3 lbs
- 8) HEAT TREAT TO MIN. ULTIMATE TENSILE STRENGTH = 152 ksi AND MIN. YIELD TENSILE STRENGTH = 141 ksi
PER MIL-S-6758 OR AMS2759/1E AFTER MACHINING.
ACCEPTABLE TO VERIFY TENSILE STRENGTH BY HARDNESS TEST PER ASTM E18 TO 34-40 HRC.
- 9) OPTIONAL: ONLY REQUIRED WHEN MAKING D350-636-215/-216/-217/-218, NOT APPLICABLE ON D2741-NP.

E	ADD D2741-NP (NO PAINT) OPTION (ZN A8-1)	DB	13.08.29
D	ADD Ø0.201 HOLES AND NOTE 10 (ZN D7-1) REMOVE -041/-043 OPTIONS REFORMAT DWG. REF PART11-72	SFM	13.02.21
C	LARGER HOLE, ADD RADIUS AND CHAMFER ADD -041/-043 OPTIONS	PH	06.01.12
B	CHANGE C'SINK TO C'BORE	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	DB		
CHECKED	AP	DRAWING NO.	REV. 8
MFG. APPR.	AP	D2741	SHEET 1 OF 1
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	BLADE	NTS
DATE	13.08.29	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	